Computer lab 6 Name _____
Test your knowledge of the concepts.

1. Parsimony means:
A. We need as many parameters in a model as we have data points
B. We can only find the precision of our parameters in an asymptotic way in nonlinear regression
C. We should try to fit with as few parameters as we can
D. We have to have a good initial guess of our parameters otherwise the nonlinear fit does not work
E. We should try to fit with as few parameters as we can get away with to avoid excessive lack of fit
F. We should use refinement to fit nonlinear models

2. If the model is linear in the parameters we do not need to iterate because
A. The dependent variables do not depend on the parameters
B. The independent variables do not depend on the parameters
C. The parameters do not depend on the dependent variables
D. The elements of the J (or X) matrix do not depend on the parameters
E. The random errors in the measurement do not depend on the parameters

3. The logistic function has an important property: both for very low and for very high values it approximates a constant value ('goes flat'). This is important because:
A. This is actually detrimental because it causes lack of fit
B. This allows us to measure the weight loss before and after an event even when it overlaps with another
C. This allows subtraction of the constant weight of the platinum basket
D. This causes the function to have only three parameters

Assignment part Show your fit results to the TA first

4. Report the final values of the nonlinear fit of the assignment in 2& 15 format. First write down what model you were using.
Make sure you indicate all parameters you have refined as A,B,C,D etc.
Also report the value of the final sum of squares